INDIANA DEPARTMENT OF TRANSPORTATION
OFFICE OF MATERIALS MANAGEMENT

SAMPLING DEICING MATERIAL
ITM No. 810-08T

1.0 SCOPE.

1.1 This test method covers the procedures for sampling deicing materials from a truck, stockpile, or liquid transport.

1.2 Deicing materials will be sampled only at each delivery point if used by the District Maintenance Department. Samples shall be taken as soon as possible after delivery of material.

1.3 The values stated in either acceptable English or SI metric units are to be regarded separately as standard, as appropriate for a specification with which this ITM is used. Within the text, SI metric units are shown in parentheses. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently to the other, without combining values in any way.

1.4 This ITM may involve hazardous materials, operations, and equipment and may not address all of the safety problems associated with the use of the test method. he user of the ITM is responsible for establishing appropriate safety and health practices and to determining the applicability of regulatory limitations prior to use.

2.0 REFERENCES.

2.1 ITM Standards.

207 Sampling Stockpiled Aggregates

3.0 TERMINOLOGY. Definitions for terms and abbreviations shall be in accordance with the Department's Standard Specifications, Section 101.

4.0 SIGNIFICANCE AND USE. This ITM shall be used to sample deicing materials at the point of delivery.

5.0 APPARATUS.

5.1 Fire shovel

5.2 Sampling tube, PVC pipe of 3 to 4 ft (900 - 1200 mm) in length and 2 to 4 in. (50 to 100 mm) in diameter

5.3 Sample containers

6.0 SAMPLE SIZE.

6.1 **Bulk Shipments.** Bulk shipments include loose material or material in containers weighing more than 100 lbm (45.4 kg). A sample of 10 lbm (4 kg) to 15 lbm (6 kg) shall be obtained.

6.2 **Moisture-Proof Bags.** Moisture-proof bag shipments include material in containers of 100 lbm (45.4 kg) or less. One unopened bag shall be obtained.

6.3 **Liquid Samples.** A 1 qt. (1 L) sample shall be obtained in a plastic or glass container.

7.0 SAMPLING.

7.1 **Truck Sampling.** A sample may be obtained from a truck in accordance with the following procedure:

7.1.1 Insert a fire shovel horizontally into the material at the approximate mid section of the truck and lift the fire shovel vertically to establish a horizontal plane in the material

7.1.2 Insert the fire shovel vertically to establish a vertical face below the horizontal plane

7.1.3 Insert the fire shovel horizontally into the vertical face at the depth of approximately twice the thickness of the maximum particle size of the material. Lift the fire shovel vertically to obtain the sample, and place the sample into the sample container.

7.1.4 Seal the container to prevent the loss of moisture

7.2 Stockpile Sampling. A sample may be obtained from a stockpile prior to placing the material in the storage building. The sample shall be obtained with a fire shovel or sampling tube in accordance with ITM 207, section 5.2. The sample container shall be sealed immediately to prevent loss of moisture.

7.2.1 Samples shall not be obtained by climbing onto stockpiles due to the hazard of burial and suffocation from unstable stockpiles of unconsolidated materials. Also, over-steepened stockpiles may sluff and engulf personnel in the immediate area.

7.2.2 Personnel requiring additional information concerning specific sampling situations are directed to contact the appropriate District Testing Engineer.

7.3 Liquid Transport Sampling. A sample of liquid deicing material shall be obtained from the transport in accordance with the following procedure:

7.3.1 Circulate the material in the transport sufficiently to assure uniform material

7.3.2 Obtain the sample from a valve in the discharge line of the transport

7.3.3 Use only new, clean dry sample containers

7.3.4 Drain enough material from the discharge line before sampling to clear the line of any sediment

7.3.5 Seal the filled container immediately with a clean dry, tight fitting lid

7.3.6 Label the side of the container